

United States Patent [19]

Hauck et al.

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[54] **OPTICAL INPUT ARRANGEMENT AND METHOD OF USING SAME**

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Related U.S. Application Data

[63] Continuation of Ser. No. 3,304, Jan. 12, 1993, abandoned, which is a continuation-in-part of Ser. No. 829,880, Feb. 3, 1992, abandoned, which is a continuation-in-part of Ser. No. 656,803, Feb. 14, 1991, abandoned, which is a continuation-in-part of Ser. No. 433,029, Nov. 7, 1989, abandoned.

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[57] ABSTRACT

An optical input arrangement and method includes an optical device for sensing a projected image and for detecting the presence of a high intensity optical input signal light by discriminating it from the entire projected image and the ambient light reflecting from a viewing surface. A determination is made as to when the differences in intensity of sequentially measured pixel intensity values of the light reflected from the viewing surface exceeds a positive threshold amount and substantially immediately thereafter decreases more than a negative threshold amount, to facilitate an even more precise discrimination between the input signal image and the overall projected image. An alignment device generates an optical signal for facilitating the alignment of the arrangement to capture the entire image reflecting from the viewing surface.

37 Claims, 5 Drawing Sheets

